

International Recognition for Digital Signatures – A Need for a World Wide Common Approach?

Panel-Chair:

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Abstract

This panel gives an overview of the current situation dealing with the European and the international situation for agreements and recognition for digital signatures and certificates. More than 40 states in the US and several European nations have implemented or at least defined a first act to establish uniform economic conditions for the various applications of electronic information and communication services, mostly tailored for the application of electronic or digital signatures. In addition currently the task to build a “European directive for electronic signatures”, performed by the European Commission (EC) in corporation with the EU-member states, is in its final steps. This directive will be a major step towards the international harmonisation in the application area of digital signatures.

As some other nations world wide, Germany has implemented yet a law for digital signatures. One major issue of all these bills or acts is – as addressed explicitly in details in the EC-directive for electronic signatures - the agreement and recognition of national and international electronic / digital signatures and certificates.

During this panel problems dealing with technical and legal issues for the recognition of signatures and certificates will be presented. Advantages and disadvantages of different kind of underlying structures such as cross-certification, bridge certification or hierarchical based structures will be explained. The problems of the transitivity of such recognition will be discussed and technical solutions will be offered. Problems arising by the comparison of different security levels defined by technical, organisational and procedural requirements as the major contributions for the level of trust of a certification scheme will be demonstrated. Issues, as interoperability – its need and some technical solutions – will be addressed. The need for standardisation and models for the solution of such problems will be presented.

The United Nations Commission on International Law (UNCITRAL) working group for “Electronic Commerce” should respect this issue for the world wide application and the recognition of electronic / digital signatures. This panel will give an answer whether UNCITRAL has some useful answers or if this is still an open issue.